under the direction of, and with the fullest coöperation of the Council of the California Medical Association. It has been designed not for a day nor a year, but for permanency.

I urge that politicians and lay organizations keep their hands off and permit us to extend this plan throughout California. Call us "reactionary" if you will, but let us go ahead with this plan without interference, and we will show you one of the greatest examples of progress in medicine of this or any other period.

A recent speaker said that "the eyes of the nation are on California." Permit me to answer that California is too busy to care. We have been reproved from the platform and in the press for our failure to act swiftly. Gentlemen, we do not intend to be stampeded into some hastily conceived plan because we know, and any reasonable and fully informed person will agree with us, that any such plan would meet with an equally swift death.

We are not dealing with merchandise, but with human beings. The health and happiness and, yes, the very lives of our people are at stake. We are prescribing, to the very best of our collective ability, for our people. It is our job. We do not fancy having laymen prescribe for us or for our patients.

The lay proponents of compulsory insurance reply that their intention is not to interfere with the science of medicine, but that they have the right to speak for the people in regard to the application of medicine. But are they speaking for the people? Since when has the voice of the people been heard to say: "Take medicine away from the medical profession and give it to the politicians?""

And that, my friends, is exactly what will take place if medical service and hospitalization go under government control, whether state or federal. It would become another political football. We have only just witnessed a fine example of congressional athletes kicking one political football about the halls of Congress. Let us, by all means, avoid the pitfall which has engulfed State Industrial Accident Insurance. Despite the promises that every employee would be given free choice of physician, we now find the medical service being administered by a small panel of physicians, selected by the insurance companies. We find these same company physicians exacting fees from other physicians throughout the state.

My friends, I do not set myself up as an oracle of medical economics. I have only endeavored, in my humble way, to express not alone my own ideas, but the best thought of the medical profession as I understand it.

I, therefore, earnestly recommend to the California Medical Association the adoption of a voluntary plan for medical service to serve the people of California.

To have served you during this last year has been both an honor and a pleasure. I shall look back upon those busy twelve months as a bright spot in my career.

Farewell, as your president, and God bless you, one and all!

532 Fifteenth Street.

FOCAL INFECTION—SOME MODERN ASPECTS*

By Russell L. Cecil, M. D. New York City

A FOCUS of infection is a localized area of tissue which has been infected by pathogenic bacteria. The primary focus is the tissue first infected, from which bacteria gain entrance into the blood or lymph stream and thereby cause either systemic disease, or secondary foci of infection, in the various organs and tissues of the body.

INCIDENCE

Focal infection is one of the most universal of human ailments. Very few people get through many years of life without experiencing some form of it. The focus may occur almost anywhere in the body, but certainly the most usual foci are found in the mouth, pharynx, accessory sinuses or middle ear. Rosenow 1 believes that a focus of infection is more menacing when the infectious material is under pressure; that is, where facilities for drainage are poor. Such a focus would be an apical root abscess, or a small abscess in the interior of the tonsil.

ETIOLOGY

Many factors predispose to focal infection. Among such may be mentioned long-protracted illness, old age, exposure, addiction to excess alcohol or drugs, and poor personal hygiene. The devitalization of teeth and gingivitis predispose to dental infections. It appears almost certain that a deficiency in the vitamins predisposes to focal infection. For example, David Smith 2 has shown that guinea-pigs deprived of vitamin C develop pyorrhea and ulcers of the stomach. I have always suspected that the prevalence of infected tonsils was largely the result of modern city life. The tonsil was planned by nature as a scavenger to relieve prehistoric man of bacteria, dust and other foreign bodies that accumulated in the mouth. Modern man, however, lives mostly in large cities, where he is subjected daily to the inhalation of an excess of dust and bacteria, and as a result the tonsil, overloaded with infectious material, breaks down under the strain. Chronic sinus infection and chronic middle-ear infection are induced by repeated acute respiratory infections.

EXCITING CAUSES

The focus of infection may be caused by almost any of the ordinary pathogenic bacteria, but bacteriologists have come to associate some form of streptococcus with a majority of focal infections, and rightly so, since the streptococcus is not only the most frequent exciting agent in these conditions, but, furthermore, appears to be the organism most likely to set up secondary infection in some distant organ or tissue of the body. For example, according to Haden,³ apical abscesses of the teeth are caused, in 92.5 per cent of cases, by

^{*}Guest speaker paper. Read before the general meeting of the California Medical Association at the sixty-third annual session, Riverside, April 30-May 3, 1934.

some form of streptococcus. This has also been my own experience. It is claimed by Bunting ⁴ that dental caries is caused by the *Bacillus acidophilus*, but dental caries is not primarily a significant form of focal infection. Pyorrhea is usually associated with a mixed bacterial flora, but streptococci are always present in large numbers.

Acute and chronic tonsillitis are streptococcal infections in almost 100 per cent of cases. G. I. Steffen and the writer once produced experimental tonsillitis in a human volunteer by swabbing his tonsils with a pure culture of Streptococcus hemolyticus. Curettings from the interior of the tonsils usually give a pure culture of Streptococcus hemolyticus or viridans, or possibly one of the intermediary forms of streptococcus.

Acute sinus infections are usually due to some form of streptococcus or pneumococcus, or possibly a Pfeiffer bacillus. In long-standing chronic sinus infections, a streptococcus, or pneumococcus, may be recovered, either alone or in association with a *Staphylococcus albus* or aureus. This is true, also, of chronic discharges from the middle ear. Chronic infections of the gall-bladder usually show either colon bacilli or some form of streptococcus. The same is true of infections in the pelvis of the kidney. Prostatic infections in the male, or cervical infections in the female, yield gonococci, streptococci or some form of colon bacillus.

PATHOGENESIS

The metastases of focal infection occur through the blood stream, or through the lymph channels. The vascular route is the commonest method, and is well typified in gonococcal arthritis, where the primary focus is in the urethral tract, and the gonococci, escaping into the blood stream, localize in the joints and set up metastatic infections there.

But infections may also spread through the lymph channels. We are all familiar with those patients who develop a septic sore throat or tonsillitis, which is followed by enlargement of the cervical lymph nodes, and perhaps suppuration in one or more of them.

The rôle of allergy in focal infection is well illustrated by the patients who develop asthma, secondary to chronic infection in the accessory sinuses.

The part which allergy plays in the pathogenesis of focal infection is not definitely known, but it is quite possible that a primary focus of infection might induce injury in distant parts of the body (in the joints for example), by the action of an allergen which would be discharged from the primary focus, and which would react on sensitive tissue in the joint. Swift,6 for example, cites rheumatic fever as a disease which presents evidence of an exciting focus of infection somewhere in the body, usually in the form of tonsillitis, sinusitis or other form of infection in the upper respiratory tract. These foci, in his opinion, represent areas where the sensitizing substance is produced, and from where it is distributed to the entire body, as well as localities where bacteria may be fed into the blood stream.

EXPERIMENTAL FOCAL INFECTION

Focal infections about the teeth have been produced experimentally by Rosenow, Haden, and others. Rosenow and Meisser devitalized the teeth of dogs, and then infected them with the staphylococcus from a case of nephritis. One dog developed pyelitis and cystitis, with marked calcareous deposits in the pelvis of the kidney. The same authors recovered streptococci from the infected teeth of patients with nephrolithiasis. The teeth of healthy dogs were then devitalized, and the pulp chambers of these teeth infected with heavy suspensions of the streptococci. The infected teeth became discolored, but remained firmly in place in the alveolar sockets. These infections caused rarefaction and absorption of bone in the periapical region without swelling or tenderness. Renal calculi or lesions in the medulla of the kidney developed in a high percentage of the dogs whose teeth were infected in this manner. Later, Meisser produced experimental ulcer of the stomach by the same procedure, that is, by injecting into the root canals of dogs streptococci obtained from the infected teeth of patients with gastric ulcer. Strangely enough, this experiment failed when an attempt was made to produce experimental arthritis by this method. Rosenow 8 thought that this failure was due to the fact that streptococci from patients with chronic arthritis were less virulent than the other strains. It is more probable, however, that his failure can be explained by the high natural immunity which dogs possess against infections of the joints. In most of the experimental work reported by others the streptococci recovered from infected teeth have not been injected into the tooth sockets of animals, but directly into their veins. A large amount of research has been done along this line. Hendrici, Moody, 10 Rosenow, 11 Price, 12 Meisser and Gardner,18 Haden, and others, have all made extensive studies of the lesions in rabbits which follow the injection of streptococci from infected teeth. This, of course, leads us to Rosenow's wellknown theory of elective localization, following the intravenous injection of streptococci. His theory is that the streptococci which are present in infected tonsils, teeth, and sinuses have a special affinity for certain organs. Some localize in the joints, some in the heart, some in the appendix, gall-bladder or kidney, some in the gastric mucosa, etc. Rosenow found that, as a general rule, streptococci which have been obtained from various foci of infection tend to localize and produce lesions in animals corresponding to those in the patients, or in the animals, from which the microorganisms were originally isolated. In other words, a streptococcus from the teeth or tonsil of an arthritic tends to produce arthritis when injected into a rabbit. The streptococcus from a focus in a patient with pyelitis tends to produce pyelitis in the experimental animal, etc. Rosenow's 14 doctrine of elective localization has not received universal acceptance, although I believe that there is more proof in its favor than there is against it. The carefully conducted experiments of Hendrici, Haden, and others have corroborated, in great part, Rosenow's findings.

RELATION OF FOCAL INFECTION TO SYSTEMIC DISEASE

It was remarked, in the beginning, that many individuals harbor foci of infection for years without suffering any constitutional ill effects from them. In most people, however, a chronic focus of infection will sooner or later make itself felt. This will usually occur when the resistance of the patient has been lowered by fatigue, exposure or some other disease. The distant manifestations of focal infection are many. Indeed, almost any organ of the body can suffer as a result of such infection. There are certain systemic infections, however, which we have learned to associate especially with focal infection, and it is these conditions which I now wish to discuss.

- 1. Rheumatic Fever.—Rheumatic fever is usually preceded by an acute infection in the upper respiratory tract. Usually this infection is an acute tonsillitis of streptococcal origin, although it may be an acute coryza, or an acute pharyngitis. Dochez and his co-workers 15 have shown that acute respiratory infections, though caused by a filtrable virus, may activate the ordinary pathogens of the mouth and thereby increase their virulence. If we conceive of the streptococcus as having been acted on in this way, it would give us a working hypothesis which would explain the manner in which rheumatic fever is related to a primary focus in the nose and throat. Coburn 16 has found that patients with rheumatic fever carry hemolytic streptococci in their throats, and that these streptococci persist during the active stage of the disease. He has also noted the presence of hemolytic streptococci in the throats of these patients during an acute respiratory infection pre-ceding rheumatic fever. Coburn's work has excited a great deal of interest, and serves to strengthen still further the streptococcal theory of the etiology of rheumatic fever.
- 2. Bacterial Endocarditis. A very high percentage of those who develop bacterial endocarditis give a preceding history of rheumatic fever. In some of those patients with streptococcal infection of the heart valves, the chronic focus of infection is readily located in the tonsils, teeth, or sinuses. This, however, is not always the case. Both rheumatic fever and bacterial endocarditis show high agglutinins with the streptococcus, usually the Streptococcus viridans. The theory that bacterial endocarditis is nothing more than a complication of rheumatic fever has always intrigued the writer. This theory, however, is not generally popular with students of this disease, although I believe that Clawson is a strong advocate of it.
- 3. Chronic Arthritis.—Chronic infectious, or so-called rheumatoid arthritis, is the disease associated most closely in the minds of physicians with focal infection. To Frank Billings ¹⁷ and his school of co-workers the credit must go for bringing out this important connection. There is doubt in the minds of some investigators as to whether focal infection plays much part in the very sluggish indolent afebrile form of rheumatoid arthritis, since the removal of foci in these patients often fails to relieve the joint symptoms. On the

other hand, the active type of infectious arthritis with fever, warm swelling of the joints and severe secondary anemia is obviously an infection, and when foci are removed in such cases the clinical results are often spectacular. The writer,18 while admitting the soundness of the above point of view, feels that it is impossible to differentiate clinically or etiologically between these two types of arthritis. Both types show increased sedimentation rate of the red blood cells and agglutinins for the Streptococcus hemolyticus. I believe that they are one and the same disease. We have active and inactive forms of tuberculosis and syphilis, and so it is with rheumatoid arthritis. In some patients the reaction to the disease is sharp; in others it is sluggish. But I believe that both syndromes are forms of the same infection, and both secondary to primary foci of infection, usually in the sinuses, tonsils, or teeth. The same is true of muscular rheumatism and neuritis.

In some studies on the bacteriology of rheumatoid arthritis, which we conducted several years ago at Bellevue Hospital, attempt was made to correlate the streptococci isolated from the blood and joints of patients with rheumatoid arthritis, with streptococci isolated from various foci of infection in the same patient. In a number of cases streptococci morphologically, culturally and biologically identical were recovered from the blood, joint and focus of infection in the same patient. For example, in one case apparently identical strains of streptococci were recovered from the blood, from the joint and from infected tonsils. In another case identical strains were recovered from the blood, from the tonsils, and from an erythematous bulla on the skin. In still another case identical strains of streptococci were recovered from the blood, from the joint, and from an apical root abscess about one of the teeth. In all these instances the identity of the strains recovered was established biologically and culturally by agglutination and absorption tests.

Experimental Arthritis. — Numerous investigators have produced arthritis experimentally in rabbits and dogs by the intravenous injection of streptococci, but the production of experimental arthritis by the simple procedure of producing a primary focus of infection is more difficult. Moon, 19 however, established a chronic focus of infection by putting a piece of cotton soaked with green streptococci in the peritoneal cavity of dogs. The dogs developed arthritis, and a verrucous endocarditis which was not dissimilar from a rheumatic endocarditis. Histologically, the collection of cells in the heart muscles and valves were suggestive of Aschoff bodies.

As to the relative importance of various foci, the writer has always attached most importance to the tonsils as a focus of infection in rheumatoid arthritis; but my friend, Ralph Boots of New York, gives infected sinuses the first place. We both feel that infected teeth have been overstressed in this disease, though undoubtedly certain cases are referable to root abscesses.

Uveitis, iritis, and iridocyclitis are not rare complications of rheumatic fever and rheumatoid arthritis, and, like the joint manifestations, are presumably metastatic infections from an original focus. In these infections of the eye, the sinuses are probably more frequently to blame than the other primary foci of infection such as the tonsils and teeth. I believe that the laryngologists will agree that chronic infection of the ethmoid and sphenoid cells is most frequently responsible for these eye conditions.

Erythema nodosum is another condition frequently seen with rheumatoid arthritis or rheumatic fever, and like iritis, it is usually referable to some primary focus of infection. Erythema nodosum, in most cases, is favorably affected by the removal of the original focus. Billings and Rosenow and other more recent writers have looked upon acute appendicitis and cholecystitis as hematogenous infections secondary to some primary focus. In appendicitis, fecal stones and other mechanical disturbances may cause obstruction of the lumen of the appendix and thereby establish conditions favorable for infection. Rosenow 20 isolated a strain of streptococcus from an infected gall-bladder, and found that it was identical morphologically and culturally with the strain which he had isolated from the same patient's tonsils. Both strains, when injected intravenously into animals, produced cholecystitis in them.

Pathologists are coming more and more to look upon glomerular nephritis as secondary to some preceding infection. LeCount and Jackson ²¹ were able to produce glomerular nephritis in animals by the intravenous injection of streptococci isolated from the tonsils of patients suffering from epidemic sore-throat. Billings claimed that, in his clinic, strains of streptococci had been isolated from infected tonsils or other apparent foci of infection of patients suffering from nephritis, and that these streptococci, when injected intravenously into rabbits, almost inevitably caused glomerular nephritis with albuminous urine containing many bloody casts.

This brief review of the relation of focal infection to systemic disease is far from complete, but indicates what an important place focal infection occupies in the modern treatment of disease. A distinguished colleague has once said that the present-day practice of medicine consists largely in an attempt to discover and eradicate foci of infection.

DIAGNOSIS OF FOCAL INFECTION

The recognition of foci of infection may be very easy or very difficult, depending upon various circumstances. Even with all the modern methods of diagnosis at our command, foci of infection are still frequently overlooked in the best clinics. Furthermore, the decision as to whether or not infection exists in a certain organ is sometimes very difficult. Let us consider, briefly, the diagnosis of the more prevalent foci of infection.

The Tonsils.—What constitutes a chronically infected tonsil? Many sharp debates are held on this subject every day in hospitals and in physicians' offices. An enlarged, congested, cryptic tonsil from which pus can be squeezed offers no

problem; it is obviously infected. Such tonsils frequently cause enlargement of the cervical lymph glands. Small buried tonsils, bound down by adhesions and associated with congested pillars, readily arouse suspicion. Then there is the tonsil stump, which frequently causes more toxic symptoms than the original tonsil did. Finally, there is the apparently normal tonsil which contains small abscesses in its interior. Recently efforts have been made to diagnose infected tonsils and teeth by examination of the blood. V. Schmidt,22 for example, found that when an infected tonsil was massaged, there was forced into the circulation certain toxins which caused an increase of the polymorphonuclearcytes, varying from one hundred to six thousand. On the other hand, when the normal tonsil was massaged, there was no increase in the leukocytes; or, perhaps, even temporary leukopenia resulted.

Worms and Le Mee 23 corroborated the findings of Schmidt. They found that when the tonsil was massaged, or better still, when it was subjected to suction, a leukocytosis occurred only in tonsils that were actively infected. However, they were not able to corroborate Schmidt as to normal tonsils; that is, they were not able to observe leukopenia following massage or suction of normal tonsils. Both these writers noted a leukocytosis coming on within four to five hours after an infected tonsil had been massaged. Gording and Björn-Hansen²⁴ have recently published an interesting monograph on focal infection and its relation to joint disease. They divided their cases of primary chronic polyarthritis into two groups: those associated with definite foci, and those in whom no focal infection could be demonstrated. In the former group, the leukocytes were found elevated, and a shift to the left was present; whereas in those cases of polyarthritis without demonstrable foci of infection, the Schillingcount usually failed to reveal any increase in the immature cells. These authors further noticed that the shift to the left was usually much less noticeable after the foci of infection had been removed. J. H. Richards 25 has claimed that when infected tonsils or teeth are massaged, or otherwise subjected to trauma, bacteria-mostly streptococci—can be demonstrated in the blood-stream shortly afterward.

Infected Teeth.—Here again we are on controversial ground. The diagnosis of a typical apical abscess, or granuloma, is easy enough, but there are many intermediary abnormalities which give rise to debate. There are some who insist that all devitalized teeth are infected, but this doctrine is not accepted by the more conservative elements in the profession.

Sinuses.—The diagnosis of acute or chronic sinus infection can usually be made by careful physical examination, transillumination and x-rays. However, when we come to the question of obscure infections in the ethmoid and sphenoid cells, we are again on debatable ground. Chronic postnasal dripping is usually looked upon as a sign of sinus involvement, but in some cases this symptom is not associated with any clouding of the ethmoid or sphenoid cells. There is another

group of cases in which x-rays show clouding of the sinuses due to thickening of the mucous membrane. Even in such patients, the sinuses may contain little or no exudate. There is often the question in these cases as to just how significant the sinus is as a focus of infection.

Intrathoracic and intra-abdominal foci are usually more definite, and yield fairly well to modern methods of diagnosis. Chronic infections of the genito-urinary tract can usually be determined by careful study.

Summarizing then, we may say that the diagnosis of focal infection is usually achieved by thorough physical examination, and careful x-ray and bacteriological studies. In addition to those methods we now have some newer blood-tests, such as the Schilling-count and the sedimentation rate of red-blood cells, which may be most helpful in doubtful cases.

TREATMENT OF FOCAL INFECTION

Tonsils.—The important principles in the treatment of focal infection are promptness and thoroughness. The offending focus must be removed at once, and removed completely if good results are to be expected. In the opinion of the writer, the only treatment for infected tonsils is tonsillectomy. I am not very sympathetic with the removal of tonsils by electro-coagulation. The tonsils should not only be completely removed, but they should be resected out with as little trauma as possible in order to avoid exacerbation of the systemic condition. This is particularly noticeable in the case of chronic arthritis, where rough handling of the tonsil may bring on a sharp increase of joint pain and swelling.

Teeth.—Infected teeth should be extracted, but it is better practice to remove only two or three at a sitting. The attempt to drain apical abscesses through the root canal has not proved very satisfactory.

Sinuses.—The handling of chronic sinuses is still a controversial field, especially as regards infected ethmoid and sphenoid cells. This is surely one of the most vexing problems in modern medicine. It is comparatively simple to establish good drainage in a chronically infected antrum, but just what are the indications for radical surgery on the ethmoid and sphenoid cells, and how much benefit can we expect from such operations? Chronic ethmoid and sphenoid infections sometimes respond to conservative methods of treatment, such as suction and argyrol packs, and certainly a great many are helped by residence in a dry, hot climate, such as that of Arizona.

Appendix, Gall-bladder and Intestinal Foci.— Foci of infection in the appendix, gall-bladder and intestinal tract always present problems which require the exercise of the best clinical judgment. How much systemic improvement can we expect from the removal of an infected gall-bladder? In a middle-aged woman, for example, where exacerbations in the gall-bladder infection are associated with flare-ups in the joints, we can be fairly certain that removal of the gall-bladder will give definite relief; but where no such close asso-

ciation is demonstrable, the chance of systemic improvement after operation is not so certain.

The same holds true with regard to chronic infections in the genito-urinary tract, especially if they are low-grade in character.

The following is a case in point:

H. B., male, age fifty-three.

April, 1932.—Onset of arthritis, with pain and swelling of various large joints, especially the knees and the ankles. History of several attacks of renal colic. September, 1932.—Admitted to New York Hospital. Chronically ill. Both knees and feet swollen. Chronic ethmoiditis. Blood pressure, 190/110. Trace of albumin and red blood cells in urine. Secondary anemia. White blood cells, 5,300. Immature cells 14 per cent. X-ray of kidneys showed mulberry stone in the pelvis of right kidney.

Comment.—The problem in this case was: how much benefit, in respect to the joints, could be expected from removal of the kidney stone, and was such an operation justified in view of the obviously poor condition of the patient? In addition to his arthritis, he had high blood pressure, some evidence of nephritis, a heart muscle which was none too good and a chronic ethmoiditis. Several surgeons were frankly opposed to operation in this case, especially in view of the fact that the stone was silent and there was practically no pus in the urine. They argued that the sinuses and not the stone were the probable focus of infection. After considerable debate, however, the stone was finally removed, October 22, 1932. The patient stood the operation remarkably well, and within six weeks after removal of the stone his joints were free from pain and much less swollen. Three months after the operation the blood pressure dropped to 145/80 and he was riding horseback. He is now working hard in his profession, and to all intents and purposes a well man.

In addition to the treatment of the focus proper, the patient who has been pulled down by some chronic focus of infection must be rehabilitated by the usual measures. The anemia will need iron and other tonics; the loss of weight, a high calory diet rich in vitamins; and in many instances, particularly where the joints are involved, vaccine therapy seems to have a definite value. Following the elimination of the focus, the patient will often need a prolonged rest cure, preferably away from home at some spa, or perhaps nothing more elaborate than the mountains or seaside. Some very able physicians prefer to build up the patient before the focus of infection is removed. In exceptional cases, this may be necessary; but on the whole it seems to me more logical to remove the focus first, and then build up the patient. Occasionally patients make a spectacular recovery following the removal of a focus of infection. As a general rule, however, convalescence is slow. Three to six months, or even more time may elapse before the full benefit of the treatment is achieved.

SUMMARY

The recognition and treatment of focal infection is one of the fundamental principles in the practice of medicine. While infectious arthritis is perhaps the commonest of the systemic effects

of focal infection, it must be remembered that almost any other organ or tissue can suffer injury as a result of focal infection. The complete removal of foci of infection should be followed by a carefully planned program of rehabilitation of the patient.

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LOS ANGELES COUNTY HOSPITAL-DEDICATORY ADDRESS*

By PERCY T. MAGAN, M. D. Los Angeles

IN laying upon me the responsibility of speaking in behalf of you all at this inspiring ceremony, you have done me a great honor—one far beyond the work of my poor life to merit or deserve. In the midst of these wondrous surroundings, and this reverent setting, I can only offer up a wee prayer that I may not fail of expressing those touching thoughts which I am confident you are pondering in your innermost hearts.

We are gathered together this afternoon in the name of the people of Los Angeles County to hallow, to consecrate and to dedicate this magnificent temple of healing to earth's great cause of caring for her poor in their hour of suffering, affliction, and distress. It is meet and right that we should do this, and that here and now we should place on history's deathless page those highly spiritual purposes which have motivated the hearts of our citizens, in bringing this beautiful sanctuary for the sick—in its stately proportions so like unto a cathedral—safely through the hard hours of its conception, steadily throughout the troubled years of economic stress and storm during which it had its prenatal life, to this blessed moment of the fullness of its birth and baptism.

Let us bring forth from memory's halls a scene of the long ago when the warrior Joshua had led the people of Israel out of that terrible wilderness, dry-shod across the Jordan into the Promised Land. He called twelve men, from every tribe a man, and commanded that each should take a stone upon his shoulder out of the river bed and set it up in the place where they should lodge that night—"That this may be a sign among you, that when your children shall ask their fathers in time to come, saying, 'What mean ye by these stones?' Then shall ye answer them, that the waters of Jordan were cut off before the ark of the covenant of the Lord; when it passed over Jordan . . . and these stones shall be for a memorial unto the children of Israel forever." Such was the mighty miracle to be commemorated in the memorial of those stones.

"WHAT MEAN YE BY THESE STONES?"

And now, Mr. Chairman and Friends, may I take upon my lips the noble words of the stalwart Joshua and ask of you this day that age-old question—"What mean ye by these stones?" Let me answer for you:

You mean that this vast structure which surrounds us, builded and equipped at a cost of some 13,000,000 golden ducats, is the most costly single gift ever bestowed upon their sick poor by the men and women of any community of comparable size in any age or any clime. Amen; so let it be. It has been given with little complaining and much of a spirit of graciousness in an effort,

^{*}The Acute Unit of the Los Angeles County Hospital division of the Los Angeles County General Hospital was dedicated on April 15, 1934.

* Other articles in this issue on Los Angeles County Hospital are: article by Doctor Barrow, page 406; editorial, page 427; Miscellany, page 475.